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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,341

06/25/2003

Matthew O'Donnell

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22045 7590 07/10/2008

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EXAMINER

SHAY, DAVID M

ART UNIT

PAPER NUMBER

3735

MAIL DATE

DELIVERY MODE

07/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/603,341	Applicant(s) O'DONNELL, MATTHEW	
	Examiner david shay	Art Unit 3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 8, 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,13-15,18-21,23,24,27-29,36,40 and 44-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,13-15,18-21,23,24,27-29,36,40 and 44-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>May 8, 2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Claims 1, 2, 4-8, 13-15, 18-21, 23, 24, 27-29, 36, 40, and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeClair in combination with Wu et al. LeClair teaches manipulating materials using microbubbles, which are situated in the proper place to machine or otherwise alter the material in a desired fashion. Wu et al teach controllably manipulating compressible spherical objects with an acoustic field. It would have been obvious to the artisan of ordinary skill employ the acoustic energy directing of Wu et al in the method of LeClair, since this would enable the bubbles to be precisely positioned in the desired location, or to employ the bubble forming method of LeClair in the method of Wu et al, since Wu et al teach no method for producing gas bubbles, and in either case to employ a femtosecond laser pulse to generate the microbubble of LeClair, since this is not critical; is well within the skill of one having ordinary skill in the art; and provides no unexpected result, and would deposit the energy in the material quickly, thereby minimizing the escape of thermal energy into the surrounding medium, thus producing a device and method such as claimed.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over LeClair in combination with Wu et al, as applied to claims 1, 2, 4-8, 13-15, 18-21, 23, 24, 27-29, 36, 40, 44, and 45 and further al in combination with Ozkan et al. Ozkan et al teaches a method of cell patterning. It would have been obvious to the artisan of ordinary skill to employ the combined microbubble method of LeClair and Wu et al in the patterning of Ozkan et al since the combined method of LeClair and Wu et al does not require that charges be induces on the items to be patterned, or to employ patterning in the combined method of LeClair and Wu et al, since the combined method of LeClair and Wu et al can be used for any purposes, as taught by LeClair, and in either case to measure the elasticity of the material, since this provides no unexpected

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result, and is well within the scope of one having ordinary skill in the art, thus producing a device and method such as claimed.

Applicant's arguments with respect to claims 1, 2, 4-8, 12-15, 18-21, 23, 24, 27-29, 36, 40, 44, and 45 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to david shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Friday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, II, can be reached on Monday, Tuesday, Wednesday, Thursday, and Friday. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/david shay/

Primary Examiner, Art Unit 3735